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Celebrating 50 Years of Innovation
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Final Report
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List of Terms and Abbreviations

TO BE COMPLETED

Abstract

Celebrating 50 Years of Innovation

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The International Society for Agricultural Safety and Health (ISASH) conducted its annual conference June 24th through June 28th 2012 with the theme, "Celebrating 50 Years of Innovation in Farm Safety and Health." The conference was held Burlington, Vermont, was hosted by University of Vermont Extension, and drew 150 participants from 24 states and four countries (Finland, Norway, Sweden, Canada). Participants included occupational safety and health professionals, physicians, nurses, occupational therapists, public health professionals, extension safety and health specialists, industrial/farm environment hygienists, ergonomists, professionals from disabled farmer programs and government agencies, representatives of farm equipment manufacturers, as well as farmer-driven organizations.

One long-range mission of the annual conference is contributing to the reduction of agricultural injuries and illnesses was accomplished providing 10 concurrent sessions with five oral presentations each on current topics of concern. The broad range of topics included on-line education, agricultural medicine and nursing education, and confined spaces, neurobehavioral effects of pesticides, all-terrain vehicles, reaching non-traditional farmers, migrant/seasonal farm-workers, child safety, and rural roadway incidents. Additional research in the form of poster presentations was available for perusal. Another long-range mission is providing national and international leadership in agricultural safety and health. This mission was met through three plenary sessions on the state of agricultural safety and health, equipment roll-over protective structures and ergonomics and agriculture. A four-hour professional improvement session on social marketing drew the conference to a close.

A specific objective of the annual conference was the exchange and dissemination of information on agricultural injury and health prevention research and activities. This objective was met through the concurrent sessions and through the three off-site tours. The tours included the UVM Morgan Horse facility with stops at a family-owned tree and a family-owned orchard. Other tours included a family-owned dairy and crop farm and a tour of family-owned organic beef farm with a stop at a family-operated sugar making facility. The specific conference objective to provide opportunities for professional development through an environment conducive to networking, collaboration, and linkage-building was met through the provision of a family friendly dinner cruise, breakfasts and lunches, morning and afternoon breaks, free-time during the evenings and a banquet. Each tour guide as well as the principals at the tour location emphasized agricultural safety and health activities as well as examples of hazards that had been remediated.

Key findings are based upon the conference evaluation instrument containing 14 questions covering the plenary and all concurrent sessions. Respondents used a 1-4 (excellent, good, fair, poor) ranking for content, presentation quality, and usefulness of information. Responses were requested on all plenary sessions and the concurrent session attended during a specific time period. Findings indicate that overall responses to Content ranged from 90% Excellent to 80%Good (91% of responses). Presentation ranged from 91% Excellent to 3% Fair (87% of responses) and Usefulness of Information ranged from 95% Excellent to 81% Good (85% of responses). The highest percent of Fair was 15% and the highest percent of Poor was 5%. Yes/No questions were answered in the positive by 89% of respondents. Open-ended questions are addressed below.

Section 1 of the Final Progress Report

Significant (Key) Findings.

The most important finding of the conference is contained in the ranking of the plenary sessions and the oral concurrent sessions. Conference participants perceived the content o the plenary session on the State of Ag. Safety and Health to be 55% Excellent and 40% Good in its content and usefulness. Narrative comments indicated that notice of continued funding restrictions and sequesters influenced their ranking. Conference participants perceived the plenary session on roll-over protective structures to be 50% Excellent, 35% Good, and 15% Fair. Narrative comments indicated that information related to the research was informative but that since it was reports of current research it did not add to tangible products that could immediately impact roll-over injuries and fatalities. Conference participants perceived the plenary session on Ergonomics and Agriculture to be 65% Excellent and 30% Fair. Narrative comments indicated a divide between participants that are familiar with disabled farmer projects and those participants that are not. Those familiar with the disabled farmer projects indicated that most of material was redundant to that previously receive whereas those not familiar with those projects were intrigued by the adaptations and modifications exhibited and explained.

Conference participants overwhelmingly perceived the content of the concurrent session presentations to be Excellent or Good, overwhelmingly perceived the Presentation quality to be Excellent or Good, and overwhelmingly perceived the Usefulness of Information presented to be Excellent or Good.

Other important findings include 93% of those that participated in the Dinner Cruise responded it was enjoyable. That 87% of those that responded indicated that the Poster Session was beneficial. That 85% of those responding indicated that they liked the facility/location. Those participating in the tours responded that 93% of those attending the horse farm, tree farm and orchard thought it was what they expected. Those attending the dairy and crop farm tour responded that 89% thought it was what they expected. Those attending the organic beef and sugar making facility tour responded that 92% thought it was what they expected.

Translation of Findings.

Translation of the content reflected in the findings above into specific applications is primarily a function of the location/position of the individual participant. Participants that have daily contact with clients, patients, or farmers (both disabled and currently able bodied) may come away with specific new information that can be passed along to those they work with. Participants involved in academics/research may find specific research findings that apply to their work or they may have conversations with presenters in which other data is exchanged and potential collaborations explored.

Examples of the above include the presentation "Risks with Grain Vacuums" (Reidel) which explained the reasons for the increased use of grain vacuums, the potential physical impact on users, and case studies of fatality incidents. This information is useful to extension workers working directly with farmers and occupational therapists working with farmers dealing with vibration issues. Another example is the presentation "Cold Weather Effects on Farmers with Disabilities" (Geng) which provided data that farmers with and without disabling conditions may be at higher risk of cold related injuries compared to the general population. This information is useful to contact personnel within disabled farmer projects, to extension personnel that work directly with farmers and employees, and to physicians/nurses that may be faced with a farmer with cold-induced traumatic injuries.

Another example includes "Associations between Organic Solvent Use and Neurobehavioral Function Among Pesticide Applicators in the Agricultural Health Study" (Gerr, et al). The study indicates organic solvents use was associated with neurologic deficits but putting such findings into a public health perspective is difficult. This information is useful to public health professionals and extension workers on the need to put such research findings in perspective while still advising clients and farmers on protective equipment or alternatives that are recommended. This information could also be useful to other researchers for inclusion in their research or as a possible study to extend these interim findings.

Two examples directed at underserved populations are "Culturally Appropriate Anabaptist Safety Lessons for Youth" (Mann & Jepsen) and Overstretching the Slow-Moving Vehicle Emblem's Abilities: Lessons from the Swartzentruber Amish" (Anderson). The program presentation by Mann & Jepsen provided examples of working with focus groups of Anabaptists to select agriculture safety and health topics of concern with their community. The initiative went on to develop lesson plans that met the needs of this population and would be used by the population while still containing recommended safety and health information. The study by Anderson focused on the Swartzentruber sect of Amish that refuse to affix SMVs emblems to their buggies. This refusal has been the object of litigation in several states. The extensive review crashes of vehicles with the rear-end of buggies as well as the court cases indicate a tension between the sect's understanding of the purpose of the SMV as well as court considerations of the SMV emblems superiority to alternatives. Little research has occurred on the social understanding of SMV emblems of the sect and no research was found related to the court considerations on alternatives or the implications of the court not considering certain features of the SMV emblem that research indicates are important in preventing such crashes. Nearly all conference participants can use this study's findings from general awareness to application in other locations that contain Anabaptist populations.

A final presentation example is "Social Marketing" (Sorensen). This four-hour professional improvement session explored the theoretical structure of education and its historical use as the primary means to change risky behaviors, the dismal record of education in changing risky behaviors, and evidence indicating that the use of a social marketing strategy can have an impact on changing behaviors that have not been changed by the use of education alone or education with successive interations.

Outcomes/ Impact

The content presented in Section 1 above have the potential to address the question "How did this project lead to improvements in occupational safety and health?" The term "potential" is used due to the noted fact that any use of the content is dependent on the position and location of the individual participants. Just using the examples under Translation of Findings above will show the outcomes of the conference fall into the intermediate outcome category. Specific terminology used in the proposal closeout materials will be identified with the corresponding example presentations.

Participants with direct contact with patients/clients/farmers or their employees were presented with various alternative presentations that could directly impact, and hopefully improve their practices, Riedel and Geng. Other presentations included prevention and/or intervention techniques, Riedel, Geng, Mann & Jepsen, Anderson. Others presentations could influence safety communication, Riedel, Geng, Gerr, Mann & Jepsen. Policy and legislative action might be prompted by the findings of Gerr and Anderson.

Section 2 of the Final Progress Report

Background of the Project

ISASH has been conducting annual conferences since 1964. Long-range missions of the annual conference are contributing to the reduction of agricultural injuries and illnesses and providing national and international leadership in agricultural safety and health. Previous conference evaluations indicate that both of these long-range missions have been reached in some fashion. The incident of tractor rollovers will be used as an example of ISASH contributions. These incidents have historically been and continue currently to be the single most common cause of farm fatalities. The fact that one of the three plenary sessions was devoted to this topic indicates the continuing concern and the presentations of advancements made to date to address this situation. ISASH has been a continuing forum for this topic, has contributed through that mechanism for awareness, technological advancements to address tractor rollovers, and encouraged the voluntary step by manufacturers in 1985 to install roll-over protective structures on all new tractors and to seek assistance in developing roll-over protective structures for previously manufactured tractors. Very few farm fatalities have been attributed to a tractor rollover when equipped with a roll-over protective structure. However, this issue continues to come forward due to longevity of tractors without roll-over protection that continue to be used and for which the owner does not see fit to expend the funds necessary to purchase one and have it installed. Thus, the four-hour session on social marketing that has been shown to increase the number of roll-over protective structures purchased for older tractors.

Specific Aims

Specific objectives of this annual conference include the exchange and dissemination of information on agricultural injury and health prevention, associated research data and local activities directed towards issues of concern. The second specific conference objective was to provide opportunities for professional development through an environment conducive to networking, collaboration, and linkage-building. Both of these specific aims were addressed in the abstract and Section 1 of the Final Report.

Methodology

The methodology for selecting conference hosts and sites is asking for members to come forward with a proposal to the ISASH Board to host a particular year's conference and suggestions for locations, facilities, lodging, meals and tours.

The methodology for selecting Plenary Session Speakers and Topics is a prerogative of the Conference Host (CH) Committee. The CH Committee consults with the Professional Improvement (PI) Committee and also consults the compiled list of suggested topics supplied by individual members, the result of committee action, and recognition that a particular topic outside the former would be of use to the membership.

The methodology for selecting oral presentations, posters, and displays is through the use of an annual call for papers that is issued by the Professional Improvement Committee. The abstracts are assigned to at least two PI Comm members for review and joint suggestion on acceptance or rejection. PI Comm, in consult with the CH Comm on how much space is available for oral presentations and posters and displays, then allots the corresponding number of oral presentations for acceptance as such. During a year that more oral presentation abstracts are submitted then can be accepted, the normal response by PI Comm is to offer the author the opportunity of a poster presentation.

The CH Comm is responsible for putting together a conference evaluation with most being similar to the format and questions used for this conference.

Results and Discussion

The project PI writing this report feels that the identified conference activities, the overall discussion related to presentations, the inclusion of specific presentations with corresponding discussion, the identification of how conference missions and objections were reached and the conference evaluation finds serve to adequately address this section.

It would be possible to include a complete listing of presentation titles and authors but such information appears to be redundant to that provided as well as requiring space for over forty more citations.

Conclusions

The project PI writing this Final Report feels that content above in the Abstract, Section I and the above content in Section 2 adequately serve as a summary of the conference. Further, the project PI feels the findings from the conference evaluation noted in the same sections serve to indicate that the 2013 ISASH Annual Conference was a success, that the conference met the missions and specific objectives put forth in the proposal, and was well received by participating respondents.

Publications

Proceedings

Anderson C: [2012] Overstretching the Slow-Moving Vehicle Emblem's Abilities: Lessons from the Swartzentruber Amish Proc of 2012 International Society for Agriculture Safety and Health Annual Conference, Sandusky, Ohio, web posted at www.isash.org, June 21-25

Geng Q: [2012] Cold Weather Effects on Farmers with Disabilities Proc of 2012 International Society for Agriculture Safety and Health Annual Conference, Sandusky, Ohio, web posted at www.isash.org, June 21-25

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Reidel S: [2012] Risks with Grain Vacuums Proc of 2012 International Society for Agriculture Safety and Health Annual Conference, Sandusky, Ohio, web posted at www.isash.org, June 21-25

Sorensen, J: [2013] Social Marketing. Proc of 2012 International Society for Agriculture Safety and Health Annual Conference, Sandusky, Ohio, web posted at www.isash.org, June 21-25